NATIONAL	REGISTER	OF	HISTORIC	PLACES
REGISTRAT	CION FORM			

1. Name of Property
historic name England House and Mill (Boundary Increase)
other names/site number Red Mill
2. Location
attract t number 01 00 00 and 01 Old Red Mill Read not for publication
street & number 81, 88, 90, and 91 Old Red Mill Road not for publication city or town Newark vicinity Ogletown
city or town Newark vicinity Ogletown state Delaware code 003 county New Castle code zip code 19711
3. State/Federal Agency Certification
As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)
Signature of certifying official Date
State or Federal agency and bureau
In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)
Signature of commenting or other official Date
State or Federal agency and bureau

		========
4. National Park Service Certification		
I, hereby certify that this property is:		=======================================
entered in the National Register See continuation sheet. determined eligible for the National Register See continuation sheet. determined not eligible for the National Register removed from the National Register		
other (explain):	Signature of Keeper	Date
	Signature of Reeper	of Action

5. Classification
Ownership of Property (Check as many boxes as apply) _X private public-local public-State public-Federal
Category of Property (Check only one box) X building(s) district site structure object
Number of Resources within Property New Resources
Contributing Noncontributing
Number of contributing resources previously listed in the National Register $\underline{}$
Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)
N/A

			· ·
	Functions (Enter categories from Domestic		
cat:	Industry/Processing Extraction		Manufacturing Facility
Current	Functions (Enter categories from	inst:	ructions) Single Dwelling
Cat:	Domestic Vacant/Not in Use	Bub:	Single Dweiling
	**************************************		A.O. U
====== 7. Descr		====:	
		=====	
Architec	tural Classification (Enter cate	gorie	s from instructions)
_	Georgian		
_	Other: Vernacular House Other: Mill Building		
-	Other: Mili Building		
Material	s (Enter categories from instruct	tions))
	oundation <u>Limestone</u>		
	oof <u>Asphalt</u>		" " " " " " " " " " " " " " " " " " "
W	alls <u>Brick</u> Weatherboard		
0	ther Shingle		
Ū			

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

See Continuation Sheet

8. Statement of Significance	
	ria (Mark "x" in one or more boxes for the
contribution to the br B Property is associated our past X C Property embodies the period, or method of master, or possesses significant and distinction	d, or is likely to yield information
Criteria Considerations (Mark "X"	in all the boxes that apply.)
purposes. b removed from its or c a birthplace or a gradium a cemetery. e a reconstructed bui f a commemorative pro-	rave. lding, object, or structure.
Areas of Significance (Enter categorial Industry Architecture	
Period of Significance	Significant Dates 1747 1789 1887
Significant Person (Complete if Criterion B is marked	above) N/A
Cultural Affiliation N/A	
Architect/Builder England, England,	Joseph
on one or more continuation sheets	(Explain the significance of the property .)

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)
Previous documentation on file (NPS)
preliminary determination of individual listing (36 CFR 67) has been requested. X previously listed in the National Register previously determined eligible by the National Register designated a National Historic Landmark X recorded by Historic American Buildings Survey # DEL-137 recorded by Historic American Engineering Record #
Primary Location of Additional Data
X State Historic Preservation Office Other State agency Federal agency Local government University Other Name of repository:
Acreage of Property
UTM References (Place additional UTM references on a continuation sheet)
Zone Easting Northing Zone Easting Northing A 18 439228 4393944 C 18 439328 4393745 B 18 439362 4393855 D 18 439261 4393791
See continuation sheet.
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.) The boundary of the England House and Mill Boundary Increase is parcels 16, 17 and 20 of New Castle County Property Map No. 60, as shown on Figure 10-2, "Red Mill Complex Sketch Map."
Boundary Justification (Explain why the boundaries were selected on a continuation sheet.) The boundary includes all remaining resources associated with the England House and Mill Property.

====:	Form Prepared By					
	title <u>Gerald M. Kuncio, Historic Resour</u> d					
orgai	nization Skelly and Loy, Inc.	_date_ <u>M</u> a	ay, 20	002		
stree	et & number <u>520 Seco Road</u>	_ telepho	one <u>(4</u>	12)	<u>856-1</u>	676
city	or town Monroeville	_state	PA	zip	code _	15146
Addit	tional Documentation					
	it the following items with the completed		====		=====	
Conti	inuation Sheets					
Maps	A USGS map (7.5 or 15 minute series) india A sketch map for historic districts and por numerous resources.					
Photo	ographs Representative black and white photograp	hs of th	e pro	perty	у.	
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Description:

The England House, an eighteenth century brick residence located along White Clay Creek in Mill Creek Hundred, New Castle County, was listed in the National Register of Historic Places (NRHP) in 1972 under Criterion C as "a handsome example of an 18th century Millowner's home." In 1983, the NRHP nomination was amended and the boundary increased to include, in addition to the house, a related frame mill building known locally as Red Mill, and an ancillary frame structure. The house, mill, and ancillary building are all located on the east side of Old Red Mill Road. This amendment is being prepared to expand the NRHP boundary to include mill-related resources located on the west side of Old Red Mill Road. The resources are the Wilson House, a late nineteenth century frame house; a second, noncontributing former barn/granary, and a mill pond. The Wilson House, the barn/granary, and the mill pond are described below. This section also includes additional information concerning the interior of Red Mill.

The frame Wilson House, located on a bench across Old Red Mill Road from Red Mill, was constructed beginning ca. 1876. The house is a two-story high, L-shaped, vernacular style residence built on a concrete pargeted, random laid stone foundation. The house is three-bays wide and one-bay deep, with a two-story, three-bay deep addition extending from the south end of the main block. At the rear of the extension and partially within the legs of the ell is a later one-story addition with a gable-end roof. On the south side of the house is a three-sided, two-story, engaged turret topped by a half-hipped roof. The first and second story of the turret are visually separated by a wood beltcourse. Projecting from the facade is a one-story porch with a cross gabled shed roof, wood bedpost columns, and a low, picket-type balustrade. The porch foundation is concrete block. Windows on the house are a combination of six-over-one, six-over-six, and one-over-one, double-hung wood sash.

The current owner, who acquired the Wilson House in 1991, has removed exterior elements that detracted from the integrity of the resource. He opened the porch, which had been enclosed, and removed vinyl siding from the exterior of the ell-shaped original portion of the house. Exterior siding on the tower is shake, on the ell-shaped portion of the house is clapboard, and on the rear addition is vinyl.

The interior floorplan is a modification of a center hall plan. The transomed, central entrance door opens onto a small landing and a staircase. The staircase features machine-turned spindles and newel post. To the north of the staircase is the two-bay wide, one-bay deep living room. To the south, separated from the staircase by a wall, is a one-bay wide, one-bay deep sitting room. Increasing the interior floor space of this room is the three-sided bay of the turret. The entrance to the sitting room is at the

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stairway landing. The plaster walls and interior doors date from the period of significance.

The kitchen is located behind the living room and sitting room. It is contained in the first floor of the ell and the front portion of the one-story addition. To the rear of the one-story addition is a mud room and an enclosed porch. The kitchen has been remodeled with new appliances, cabinets, and counter space. The floor, like the floor in the living room, is the original pine flooring, which the owner exposed by removing two layers of modern flooring that had been added over time.

The center stairway branches both right and left as it enters the second floor. The second story floorplan essentially mirrors that of the first story. One two-bay wide, one-bay deep bedroom is located over the living room. A second bedroom is located over the sitting room. A third bedroom is located in the rear bays of the second story of the ell.

The Wilson House also features a full, unfinished basement and an attic located under the eaves of the asphalt covered roof. Etched into the plaster of one of the basement walls is the date 1876, the year construction began on the house. The basement is used for utilities and storage. Access could not be gained to the attic.

The Wilson House should be added as a contributing element to the England House and Mill. It has integrity of location, design, setting (as part of the mill complex), exterior materials feeling, and association. On the inside, it retains much of its original floorplan (except for the more modern one-story addition) and some interior finishes and features.

Immediately south of Red Mill is a former barn/granary for the Red Mill complex. It has been converted into a residence. Alterations include the addition of an opening and modern garage door on the first story, the addition of replacement windows and replacement board-and-batten siding, and the almost complete alteration of the interior floorplan. The changes compromise integrity, rendering it noncontributing.

Immediately to its south of the barn/granary is a mill pond. The pond was used to impound the water that powered the mill. The pond was part of Red Mills millrace. East of the mill pond, the race flows under Old Red Mill Road and beneath Red Mill, where the mill's water turbine is located. The race east of Old Red Mill Road was added to the NRHP boundary in 1983. The mill pond was not. The mill pond has been slightly altered, but not in a manner that compromises integrity. For example, a spillway at the south end of the pond is concrete, which it would not have been originally. However, the pond retains its historic location, setting, feeling, and association, and should be considered to be a contributing feature.

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The mill building, Red Mill, was listed in the NRHP as part of the 1983 boundary increase. As noted in the earlier nominations, the mill consists of two distinct sections. The oldest section, which is lower in height, dates to 1789, according to an inscription in the fieldstone foundation just north of the entrance to the lower level. This section of the mills features handhewn timber framing and tongue-and-groove siding attached by cut nails. The newer, taller section of the building sits over the millrace and dates to ca. 1887. It features a fieldstone foundation and barn siding. Sitting within the millrace, but no longer connected to a drive shaft, is a water turbine installed, according to Scharf (1888), in 1887. A one-story, shed roof addition on the north side of the mill was also added in 1887.

Red Mill historically featured two work floors plus an unfinished basement. The current owner uses the work floors primarily for storage, but pieces of interior equipment remain from the operational mill. On the first floor of the 1789 section of the mill is one set or run of millstones. It is not clear if they are original to the mill or if they were installed at a later date. It is known that the final miller at Red Mill used millstones, and not the rollers that were installed in 1887. Situated above the millstones is the hopper used to place the grain on the stones.

Located next to the millstones is the millcrane, a device used to raise or lower the millstones to the desired width for grinding. The crane is distinctive because its arm is made of wrought iron. Most mill crane arms are constructed from heavy wood timbers.

Equipment located on the first floor of the 1887 portion of the mill include a Dellinger Hammer Type Mill, manufactured by A.M. Dellinger of Lancaster, Pennsylvania; various belts, gears, and wooden hoppers; and, off to one side, disconnected, and no longer in place, a roller, presumably from 1887. A builder's plate identifies it as "Shop No. 8904, Sprout Waldron & Company, Mill Builders. Pat'd Dec. 24, 1889; Pat'd Oct. 10, 1903." Sprout Waldron, of Muncy, Pennsylvania, manufactured a variety of farm and milling equipment.

On the second floor of the 1887 portion of the building are three stacks of bolting machines. Bolting machines used fine cloths to sift the flour and remove impurities. One set of stacks is twinned. The third is located just to its north of the twinned set. Between them is a purifier, which was used to separate the middlings from the bran. The bolting machines and purifier appear to be in their original locations. All were manufactured by August Wolf & Company of Chambersburg, Pennsylvania, a well-known manufacturer of milling equipment.

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Rounding out the equipment is a set of wooden gears, metal shafts, and belts located on the second floor of the original section of the mill. The rivets and square metal bolts indicate that the equipment probably dates from the late nineteenth century.

The basement, located under the original section of the mill, contains gears that were apparently connected to the drive shaft of the turbine. According to Frank McKelvey, former Chief Curator of the Hagley Museum and Library and a noted historian of mill technology, only a remnant of the original equipment that would have been in the basement remains (McKelvey, personal communication 2002).

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Statement of Significance:

The England House, an eighteenth century brick residence, was listed in the NRHP in 1972 under Criterion C as "a handsome example of an 18th century Millowner's home." In 1983, the NRHP nomination was amended and the boundary increased to include, in addition to the house, Red Mill and an ancillary frame building. This amendment is being prepared to expand the NRHP boundary to include the Wilson House, a late nineteenth century frame house located across Old Red Mill Road from the England House and Mill, and a mill pond. Historical research indicates that the Wilson House housed the mill's miller after ownership of the England House and mill was separated. This amendment also expands the discussion of the England House and Mill's significance. In addition to being significant under NRHP Criterion C for architecture, the England House and Mill is also significant under NRHP Criterion A as an example of a New Castle County gristmilling complex that operated from the eighteenth century well into the twentieth century. The period of significance for the expanded England House and Mill is from 1726, when John England first purchased the land on which the house and mill were built, until 1965, when the mill ceased operation. The resources associated with the property -- the eighteenth century England House, the eighteenth and nineteenth century mill building, the nineteenth century Wilson House, the millrace, and the ancillary building -- convey information about how the complex operated, and how it changed over time.

Milling in New Castle County

Grist and sawmills were among the most important, and first established, industries in rural economies. Gristmills processed grain into flour and feed, important raw materials in pre-industrial economies. Sawmills provided lumber for shelter and bridges, as well as a cash crop. Gristmills have a long history in Delaware. Settlers of New Sweden erected a wind-powered gristmill prior to the arrival of Governor Johan Printz in 1644. New Sweden's earliest recorded water-powered flour mill, Molndall, was built in 1646. The number of gristmills greatly expanded following the 1655 seizure of New Sweden by the Dutch. The earliest Dutch mill, at New Amstel (now New Castle), was horse-powered. Water-driven Dutch mills first appeared in 1658. As population expanded, settlers constructed water and windmills in greater numbers (Weslager 1970:52-58).

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Mill building accelerated under the proprietorship of William Penn and his family. The first English mill in the Delaware Valley was built in 1683, and many more were constructed prior to 1700 (Kuhlmann 1929:20). At least one mill was operating on a tributary of the Brandywine River in what is now Wilmington by 1687 (Pursell 1958:5). English settlers preferred water power to less dependable wind power or more expensive horsepower (Weslager 1970:59).

Readily accessible water power soon turned New Castle County into one of the most important mill centers in the colonies. New Castle County was part of America's earliest "wheat belt," an area running from New York to Virginia. These Middle Atlantic colonies quickly gained a reputation as "America's Breadbasket" (Pursell 1958:4). New Castle County abounded in good mill seats along streams that flowed rapidly through Delaware's piedmont region. Wheat, the staple crop of the county and the entire Delaware Valley, was plentiful. Gristmills sprang up along the waters of the Brandywine, Red Clay, Mill, Pike, and White Clay creeks (Pursell 1958:1).

Blessed with abundant power and raw materials, New Castle County developed into a flour exporting center by the early eighteenth century. By 1772, the Delaware River territory, of which New Castle County was part, was exporting more than 250,000 barrels of flour and 38,000 casks of bread annually. The chief markets were in the West Indies, as well as fellow colonies and two provinces in Quebec (Kuhlmann 1929:20-22).

The growth of the export trade resulted in a concentration of well-defined milling centers. In New Castle County, the chief milling center was Wilmington, located between two streams, the Christina and Brandywine rivers. Of the two, the Brandywine was the more important milling stream. Mills appeared on the Brandywine was early as 1729, and considerable water power had developed by 1742. The Brandywine mills developed into merchant mills, or mills that produced large quantities of grain and feed (as well as other products) for export. The Brandywine merchant mills made Wilmington famous as a flour-milling center and helped make Philadelphia one of the most important ports in early America. A nineteenth century history of American manufacturing referred to the Brandywine mills as "the most celebrated flouring establishments...not only in Delaware, but in the United States" (quoted in Welsh 1956:5). Figures attest to the accuracy of this statement. In 1789-1790, for example, Brandywine flour mills produced 50,000 barrels of superfine flour (Kuhlmann 1929:22-24).

Wilmington flourished as an export center because of its superior location. The powerful stream that powered the Brandywine's mills was also accessible by shallow bottomed boats called shallops. The shallops could tie up at the mills and be loaded directly, saving transportation costs (Pursell 1958:44). To take greater advantage of this natural transportation advantage,

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the Brandywine mills mechanized their processing and loading operations to a higher degree than perhaps anywhere else in America or England (Kuhlmann 1929:24). In 1785, Oliver Evans opened his famous automatic flour mill along Red Clay Creek. Evan's mill, which used belts and elevators to move grain and flour through the mill without the need for human intervention, revolutionized the flour milling industry. After some initial reluctance, Evans innovations were adopted by the Brandywine mills. Evans's mechanized mill became the standard throughout the United States through the Civil War years

The Brandywine was New Castle County's most important mill stream, but not its only one. The same publication that extolled the Brandywine mills also mentioned "well constructed mills on Red Clay, White Clay, and other creeks" (quoted in Welsh 1956:5). Mill sites, in fact, developed on all of New Castle County's major streams, producing an array of goods, including flour and grist, gun powder, cotton and woolen goods, barrel staves, and spices. Some mills, particularly those on Red Clay Creek, were merchant mills like those on the Brandywine. They looked to Wilmington and Philadelphia as their distribution points (Pursell 1958:6-7). Other mills were custom mills, or mills that ground grains for local farmers. In return, mill owners generally received a portion of the flour or feed as payment. Merchant and custom mills differed only in size and purpose. The mills of New Castle County were described, in 1799, as "the most important industrial sources of wealth in the state." The wide variety of mills was said to be greater than in any other part of the United States (Pursell 1958:1-2).

Wilmington and New Castle County's importance as a flour milling center continued into the nineteenth century. An 1819 statistical abstract noted that "the mills on Brandywine creek, and Redclay and Whiteclay (sic) creeks, manufacture half a million of bushels of flour annually, employing upwards of 600 workers" (Pursell 1958:9). A census released the following year noted that gristmills in New Castle County trailed only textiles in the market value of their finished products (Heite 2000:4). However, flour milling's relative standing in Delaware's economy had actually begun declining with the War of 1812. Faced with an embargo on British imports, existing millers and other entrepreneurs began manufacturing in greater number such items as cotton and woolen goods, iron, snuff, and spices. Existing gristmills, located on some of the best mill sites in New Castle County, were razed or had their machinery removed to make room for new equipment (Pursell 1958:10-However, this does not imply that gristmills did not remain an important part of the county's economy. The McLane Report, an 1832 survey of American manufacturers, noted that of the 20 New Castle County gristmills that reported founding dates, 15 were established after 1820. The other five were older mills occupying prime mill seats (Heite 2000:7).

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Buffalo (Kuhlmann 1929:73-92).

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________ Flour milling remained a large source of revenue and employment in New Castle County through the Civil War. In the years following the war, gristmilling in New Castle County, particularly merchant milling, became threatened by competition from the Midwest. Delaware's merchant gristmills had endured competition since the beginning of the nineteenth century. Baltimore and Richmond, for example, both emerged as important flour milling centers in the first half of the nineteenth century (Welsh 1956:4). But the farms and processing centers of America's Middle West posed an even greater threat. The vast expanses and rich soil of the Midwest proved ideal for grain growing. The development and completion of a transcontinental railroad system in the post-bellum years made rapid and large-scale shipment of grains and finished mill products possible and affordable. Flour mills no longer needed to be located close to the sources of production and distribution. Large-scale milling centers developed at railroad hubs or along the Great Lakes, in such cities as St. Louis, Milwaukee, Minneapolis-St. Paul, and

Two technological changes, collectively called the "New Process," also assisted the Midwest in its rise to primacy and market dominance. The first was the introduction of the purifier to the grain milling process. In traditional grain milling, millstones crushed the wheat. By-products of the process were the outer husk or bran and the "middlings," a glutinous mass next to the husk. Middlings could be reground into flour, but separating the middlings from the bran was a difficult task. The purifier used a series of moving sieves to move the middlings and bran through the process, exposing them to air blasts along the way. The air blasts removed the lighter bran, leaving the middlings. The glutinous middlings were ground into a high quality flour, significantly increasing the amount of flour yielded from the grain (Kuhlmann 1929:115-118).

The second technological improvement occurred in processing. Ca. 1875, Midwest millers, borrowing a concept from Europe, began replacing millstones with rollers. The rollers, initially made of porcelain and then of chilled steel, had a number of advantages over millstones. First, rollers did not crush the wheat husks the way millstones did, making the process of separating the middlings from the husks easier. Rollers also produced less heat than millstones, lessening discoloration in the flour. And rollers required less space, power, and oversight to operate. The rolls could run for months without being changed; millstones had to be redressed every three or four days. Finally, because of the greater efficiency, rollers increased the flour yield from a given quantity of wheat (Kuhlmann 1929:122).

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Concurrent with the opening of large-scale Midwest farms and the technological improvements in milling, farms in Delaware were shrinking in size. Inheritance divisions reduced the acreage of individual farms. Consequently, some farmers abandoned Delaware, moving to larger farms in the Midwest. The nature of farming in Delaware also changed, with a movement away from grains and a greater emphasis on dairying and beef cattle. At the same time, New Castle County, and particularly Wilmington, became much more industrial in nature, especially in the second half of the century (Herman et al. 1989:11-12, 15-16). With fewer farmers and farms growing grains, the need for gristmills, custom or merchant, shrank. Those that remained adopted tenets of the New Process in hopes of improving efficiency. Red Mill, for example, installed a purifier, rollers, and a water turbine. It would remain operational through the nineteenth and most of the twentieth century, grinding flour and grist for a local market until the 1960s.

The changes altered America's agricultural dynamic. The mantle of "America's Breadbasket" shifted from the Middle Atlantic to the Midwest. New Castle County gristmills, once the most famous in America, shifted their emphasis to a more local and regional market. New Castle County census information illustrates this point. The 1860 industrial census contains information on seven gristmills in Mill Creek Hundred. Five were listed as merchant mills, two as custom mills (Bureau of the Census 1860). In 1870, four gristmills were noted; all appeared to be doing both custom and merchant work (Bureau of the Census 1870). By 1880, only one gristmill defined itself as strictly a merchant mill. Three were described as custom mills. Five indicated that they did both merchant and custom work (Bureau of the Census 1880).

The Red Mill Complex

The Red Mill complex, as noted in Section 7, consists of three major buildings -- a brick residence, a frame mill, and a frame residence -- as well as a subsidiary building and a mill pond. The three major buildings provide clues on milling operations at Red Mill, and illustrate how the complex changed over time.

The England House is the original residence associated with the property. As noted in the earlier NRHP nominations, it was first associated with the England family. In 1726, John England purchased a 600 acre tract on the north side of White Clay Creek near Muddy Run. He reputedly built the first gristmill and dam on the site, as well as part of the brick house that bears his name. Following John England's death in 1734, his brother, Joseph, acquired the land. In 1747 he apparently built the second portion of the house, either for his family or for the miller operating the mill (Mr. Field, personal communication 2001). In the same year, he passed the property onto

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his son, Joseph, Jr. Joseph, Jr. built the earliest extant portion of the existing mill, the lower portion, in 1789. The date is etched into the fieldstone foundation. A threatened resource documentation completed in 1991 concurred with the date, calling the mill building "particularly important as a rare example of eighteenth-century timber framing in upper New Castle County" (Lanier et al. 1991:50). Joseph's son, Joseph III, acquired the property in 1791. The England family would hold onto the property until 1839, when it was sold to David Eastburn.

The Eastburn family kept the England House until 1972. David Eastburn, however, sold the mill, mill seat, water power, and 17 acres of land in 1870 to Joseph Oliver and Charles Allen (New Castle County Deeds 1870a:F-9/61). The men, New Castle County millers, may have been leasing Red Mill from Eastburn (Bureau of Census 1870). Oliver and Allen sold the mill in the same year to Rathnell Wilson of Philadelphia, but may have continued to operate the Red Mill (New Castle County Deeds 1870b:Y-9/201; Scharf 1888:924).

The frame miller's house located across Old Red Mill Road from the Red Mill was constructed as the direct result of the 1870 sale of the mill tract. Once David Eastburn separated the mill tract from the rest of the property, subsequent millers needed a place to live. Rathnell Wilson apparently began construction of the frame house in 1876. This date is etched into the plaster of the basement wall. It is not clear whether the house was completed in 1876. Wilson's tax assessment for 1873-1877 listed only the 17 acres and the frame mill (New Castle County Tax Assessments 1877). The 1877-1881 tax assessment noted the house also (New Castle County Tax Assessments 1881). The date is supported by two other pieces of evidence. It appears on an 1881 map of New Castle County (G.M. Hopkins & Company 1881), but not one from 1868 (Beers 1868). The 1881 atlas and a subsequent one (Baist 1893) incorrectly attribute the house to David Eastburn. The construction date is also consistent with the house's architectural style. The house became the home of all subsequent operators of Red Mill.

According to county deed records, Rathnell Wilson sold the house, mill, and 17 acre parcel in 1876 to Edward R. Wilson of White Clay Creek Hundred for \$5,500 (New Castle County Deeds 1876:T-10/341). It is not known if the men were related. Edward Wilson held the property until 1881, when it was purchased by Thomas W. Jones (New Castle County Deeds 1881:X-11/201). Jones built the taller section of the mill and retrofitted the building with rollers and a water turbine (Scharf 1888:924). In 1888, Thomas W. Jones sold the property to Thomas J. Jones, who may have been his son (New Castle County Deeds 1888:L-14/38). Ca. 1901, the property was acquired by William Moore Eastburn, grandson of the England House's David Eastburn. In the partitioning of William's estate in 1913, the mill tract was assigned to John Thomas Moore; his relation to William is unknown. In 1921, the mill property went to another David Eastburn (New Castle County Deeds 1921:S-30/24). In

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1925, Eastburn conveyed the property to Frank H. Buckingham, a miller (New Castle County Deeds 1925:N-33/157). The Buckingham family would operate the mill until about 1965 (Mr. Field, personal communication 2001). They would own the Wilson House until 1991, when the present owner acquired Red Mill and the Wilson House (New Castle County Deeds 1991:1165/32).

Red Mill in Operation

Limited evidence exists concerning the operation of Red Mill. However, the record indicates that, throughout its history, the mill operated at times as a merchant mill and at times as a custom mill. The first concrete reference to Red Mill is an 1804 New Castle County tax assessment, which lists Joseph England, III as proprietor of "one merchant mill and one sawmill" (quoted in Heite 2000:3). The reference to England's mill as a merchant mill indicates that England was selling flour for export, purveying one of the most important export materials in the state at that time.

The 1820 industrial census is, unfortunately, incomplete, and provides no information on Red Mill and only limited information on industries in Mill Creek Hundred. The McLane Report noted five gristmills along White Clay Creek. Two were specifically referred to as merchant mills. The others, including Red Mill, were called gristmills, implying that they were custom mills (Heite 2000:4, 7).

David Eastburn, who purchased the England property in 1839, apparently leased Red Mill. He does not appear as a proprietor of a gristmill in the 1850 or 1860 industrial censuses of Delaware (Bureau of the Census 1850, 1860). In 1870, as noted above, Eastburn sold the mill and a 17 acre tract of land to Joseph Oliver and Charles Allen. According to Scharf (1888:924), Oliver and Allen operated the mill until it was sold to Edward R. Wilson. Oliver and Allen appear in the 1870 industrial census as the proprietors of a gristmill in Mill Creek Hundred, presumably Red Mill. One of four flour and feed mills surveyed in Mill Creek Hundred, Red Mill apparently operated as both a custom and a merchant mill, using an 18 horsepower waterwheel to power one set of Burr millstones. Burr stones, a product of France, were highly prized by millers. Red Mill employed one hand, who was paid \$300 per year. The mill ground wheat, other grain, and grist into flour and feed, and had a total capacity of 20 barrels per day (Bureau of the Census 1870).

Deed records indicate that Edward R. Wilson purchased the mill tract in 1876 and sold it to Thomas Jones in 1881. Neither name is present in the 1880 industrial census, indicating again that the mill was leased.

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From its founding until Jones's ownership, the mill was powered by a waterwheel. According to one source, the wheel was an undershot wheel (Works Progress Administration 1938:454). According to Scharf (1888:924), in 1887 Jones replaced the waterwheel with a more efficient water turbine and adopted the purifier and rollers of the New Process, in order to increase efficiency. Reputedly, the changes doubled horsepower and capacity (Works Progress Administration 1938:454; Scharf 1888:924). The taller portion of the mill building, which sits directly over the millrace, dates from this period. The opening over the stream is too narrow to support a waterwheel large enough to generate sufficient power. Also, the turbine, although no longer connected to the milling equipment, is still present in the millrace.

Red Mill today contains bolting machines and a purifier from the late nineteenth century. One roller remains, but it is no longer in place. A pair of millstones and the metal mill crane are located in the 1789 section of the building. It is not known from when they date. There are also sundry gears, shafts, and belts.

According to oral histories, the last millers, the Buckingham family, operated Red Mill as a custom mill for 40 years, between 1925 and ca. 1965. The Buckinghams ground corn, oats, and wheat on a limited schedule (Mr. Field, personal communication 2001).

Comparison with Other Mill Properties Listed in the NRHP

The England House and Mill compares favorably with other New Castle County mill resources listed in the NRHP. Greenbank Mill, located in Mill Creek Hundred, New Castle County, had its eighteenth century mill owners house, gristmill, millrace, and associated structures listed in the NRHP in 1973. Like Red Mill, the nineteenth century mill owner's house, also located on a bench, was added to the NRHP at a later date (in 1979). Greenbank's mill building, while larger and perhaps more impressive than Red Mill, was largely reconstructed following a 1969 arson fire.

Red Mill also compares favorably with Dayett Mill, a part of the Cooch Bridge Historic District in Pencader Hundred, New Castle County. The historic district was listed in the NRHP in 1973. The most impressive extant gristmill in the state, the four-story, Second Empire style merchant mill has most of its nineteenth century grain milling equipment intact. However, Dayett Mill does not have Red Mill's compact site, impressive eighteenth century house, or nineteenth century miller's house.

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Rotheram Mill House, located in Newark, New Castle County and listed in the NRHP in 1972, consists solely of the 1740 mill owner's house. It lacks an extant mill and other related buildings of the England House and Mill.

The England House and Mill Boundary Increase contains extant resources from the construction of the original portion of the England House until the closing of the Red Mill in 1965. The extant resources show how the complex changed over time. The complex contains the England House, a brick mill owner's house constructed in stages in the eighteenth century; the Wilson House, a nineteenth century mill owner's house, made necessary when the mill was separated from the larger Red Mill property; a mill building with two distinct halves, the original portion dating from the eighteenth century and the second portion constructed when the mill switched to using a water turbine and rollers. The completeness of the site warrants an expansion of the NRHP boundary.

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Supplemental Major Bibliographical References:

Baist, G.W.

1893 Atlas of New Castle County, Delaware. G. William Baist, Philadelphia.

Beers, D.G.

1868 Atlas of the State of Delaware: From Actual Surveys By and Under the Direction of D.G. Beers. Pomeroy & Beers, Philadelphia.

Bureau of the Census

- 1850 Industrial Schedules for Delaware. Seventh Decennial Federal Census. On file, Delaware Public Archives, Dover.
- 1860 Industrial Schedules for Delaware. Eighth Decennial Federal Census. On file, Delaware Public Archives, Dover.
- 1870 Industrial Schedules for Delaware. Ninth Decennial Federal Census. On file, Delaware Public Archives, Dover.
- 1880 Industrial Schedules for Delaware. Tenth Decennial Federal Census.
 On file, Delaware Public Archives, Dover.

G.M. Hopkins & Company

1881 Map of New Castle County, Delaware From Actual Surveys and Records. G.M. Hopkins & Company, Philadelphia.

Heite, E.F.

- 2000 Report of Phase II Cultural Resource Survey in Connection with a Proposed Improvement to the Red Clay Creek Interceptor Sewer Near Kaimensi and Stanton, Mill Creek Hundred, New Castle County, Delaware. Heite Consulting Company, Camden, Delaware.
- Herman, B.L., R.J. Siders, D.L. Ames, and M.H. Callahan
 1989 Historic Contexts Master Reference and Summary. Center for
 Historic Architecture and Engineering, College of Urban Affairs and
 Public Policy, University of Delaware, Newark.
- Kuhlmann, C.B.
 - 1929 The Development of the Flour-Milling Industry in the United States, with Special Reference to the Industry in Minneapolis. The Riverside Press, Cambridge, Massachusetts.

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Lanier, G.M., B. Herman, N. Van Dolsen, L. Bashman, N. Zeigler, S. Chase, R. Siders, D. Ames

1991 Threatened Resources Documented in Delaware, 1990-1991. Center for Historic Architecture and Engineering, College of Urban Affairs and Public Policy, University of Delaware, Newark.

New Castle County Deeds

- 1870a David Eastburn to Joseph G. Oliver and Charles Allen. Deed Book F-9, Page 61. On file, New Castle County Recorder of Deeds, Wilmington, Delaware.
- 1870b Joseph G. Oliver and Charles Allen to Rathnell Wilson. Deed Book Y-9, Page 201. On file, New Castle County Recorder of Deeds, Wilmington, Delaware.
- 1876 Rathnell Wilson to Edward R. Wilson. Deed Book T-10, Page 341. On file, New Castle County Recorder of Deeds, Wilmington, Delaware.
- 1881 Edward R. Wilson to Thomas W. Jones. Deed Book X-11, Page 201. On file, New Castle County Recorder of Deeds, Wilmington, Delaware.
- 1888 Thomas W. Jones to Thomas J. Jones. Deed Book L-14, Page 38. On file, New Castle County Recorder of Deeds, Wilmington, Delaware.
- John Thomas Moore to David R. Eastburn. Deed Book S-30, Page 24. On file, New Castle County Recorder of Deeds, Wilmington, Delaware.
- 1925 David R. Eastburn to Frank H. Buckingham. Deed Book N-33, Page 157. On file, New Castle County Recorder of Deeds, Wilmington, Delaware.
- 1991 Samuel Clifford Buckingham to Joseph and Marlene DeFillippis. Deed Book 1165, Page 32. On file, New Castle County Recorder of Deeds, Wilmington, Delaware.

New Castle County Tax Assessments

- 1877 Tax Assessments for Mill Creek Hundred, 1873-1877. On file, Delaware Public Archives, Dover.
- 1881 Tax Assessments for Mill Creek Hundred, 1877-1881. On file, Delaware Public Archives, Dover.

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Section 9 Page 3 <u>England House and Mill (Boundary Increase)</u>
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Pursell, C.W., Jr.

1958 That Never Failing Stream: A History of Milling Along Red Clay Creek During the Nineteenth Century. Unpublished Master's Thesis. On file, the Morris Library, University of Delaware, Newark.

Scharf, J.T.

1888 History of Delaware, 1609-1888. L.J. Richards & Co., Philadelphia.

Welsh, P.C.

1956 The Brandywine Mills, 1742-1815. Unpublished Master's Thesis. On file, the Morris Library, University of Delaware, Newark.

Weslager, C.A.

1970 Watermills, Windmills, Horsemills, and a Tidemill: Early Colonial Grain Mills in Delaware. Delaware History XIV(1).

Works Progress Administration

1938 Delaware: A Guide to the First State. The Viking Press, New York.

Interview with Dr. Richard Field, current owner of the England House, December 2001.

Personal Communication with Frank McKelvey, April 2002.

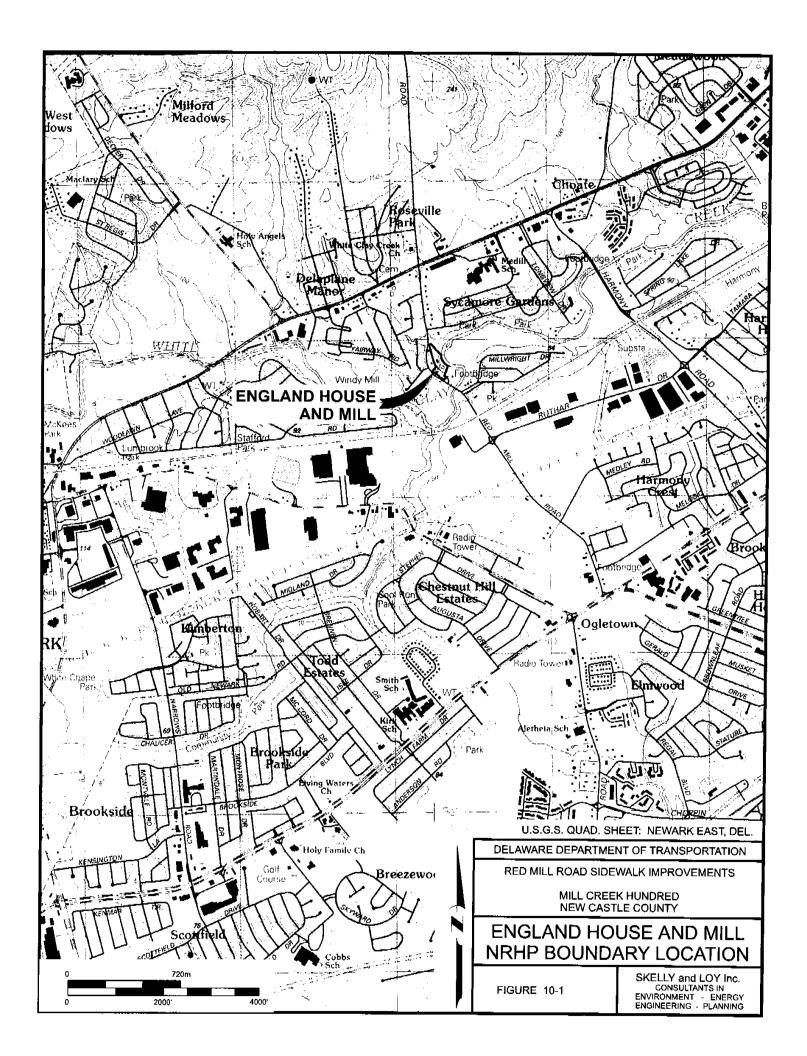
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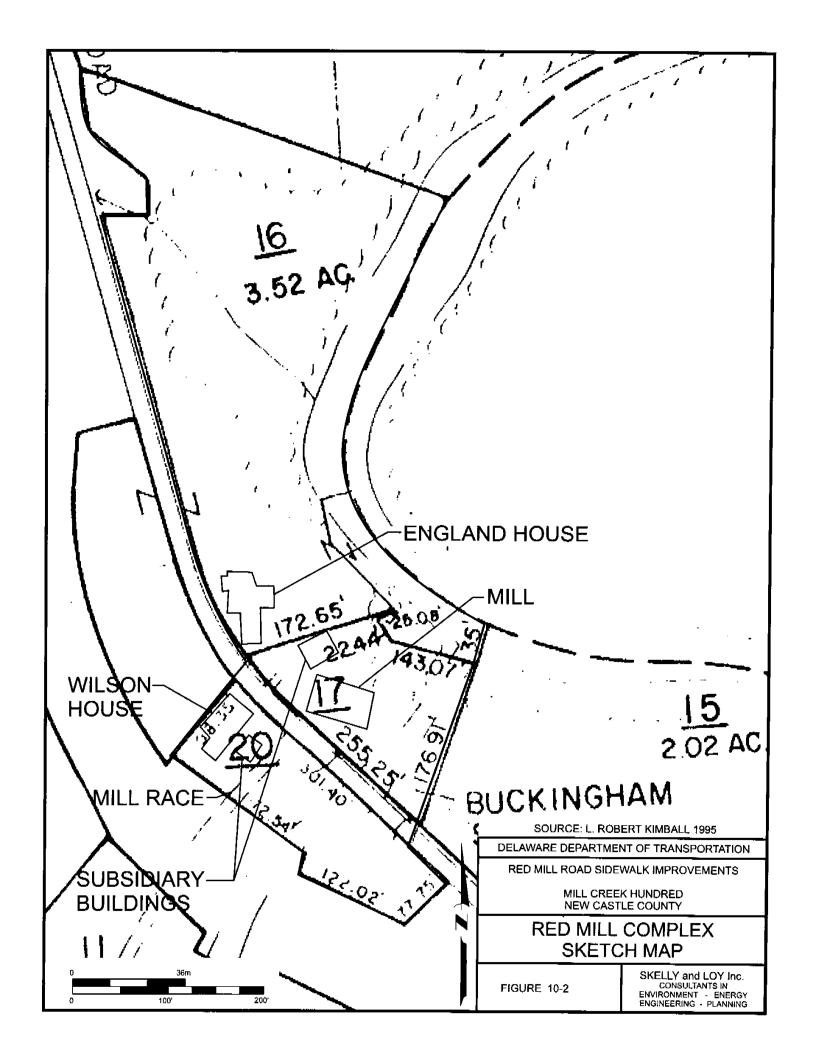
Section Property Owner Page 1 England House and Mill (Boundary Increase) name of property

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Richard Field 81 Red Mill Road Newark, DE 19711





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Photographer:

Gerald M. Kuncio

Date of Photographs:

December 2001 and April 2002

Location of original negatives:

Delaware State Historic Preservation

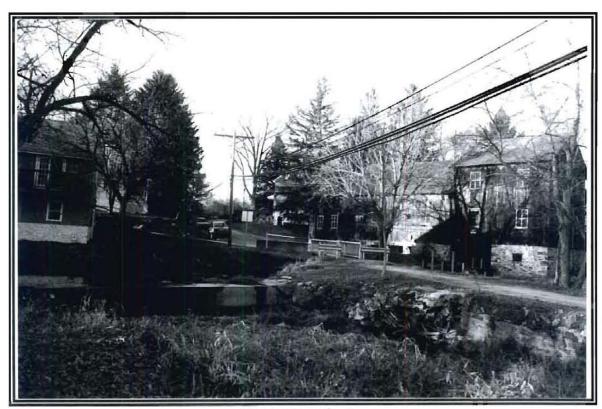
Office

Photograph Number and Description of View:

- 1. Overview of the Red Mill complex, facing north.
- England House (previously listed), facing east.
- Wilson House facade and south side, facing northwest.
- 4. Wilson House facade and north side, facing southwest.
- 5. Wilson House, rear elevation, facing east.
- 6. Wilson House interior, living room and stairway from the northeast corner of the house, facing southwest.
- 7. Wilson House interior, sitting room from the doorway, facing south.
- 8. Wilson House interior, kitchen from the doorway to the living room, facing southwest.
- Noncontributing barn/granary, facing west.
- 10. Red Mill, facade, south side, and mill dam, facing northeast (previously listed).
- 11. Red Mill, rear elevation, facing west.
- 12. Red Mill, addition on the north side of the building, facing southwest.
- 13. Date stone for the original section of the building, facing west.
- 14. Mill pond, mill dam, millrace, and drive shaft, facing east.
- 15. Water turbine in the millrace, facing northeast.
- 16. Red Mill interior, millstones, hopper, and wrought iron mill crane, facing northeast.
- 17. Red Mill interior, detail of wrought iron mill crane, facing northeast.
- 18. Red Mill interior, detail of wrought iron mill crane, facing west.
- 19. Mill crane from Greenbank mill, showing the more common wood construction, facing west.
- 20. Red Mill interior, Dellinger Hammer Type Mill, facing north.
- 21. Red Mill interior, belts, gears, and hopper, facing southeast.
- 22. Red Mill interior, roller, facing southeast.
- 23. Red Mill interior, twin set of bolting machines, facing west.
- 24. Red Mill interior, bolting machines, facing southwest.
- 25. Red Mill interior, purifier facing west.
- 26. Red Mill interior, wood gears, metal shafts, and belts, facing northwest.
- 27. Red Mill interior, power equipment remaining in the basement, facing southwest.
- 28. Red Mill, ancillary building (previously listed), facing northeast.

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Photograph 1.